UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,862	08/20/2001	Baoxin Li	KLR 7146.124	7425

55648 7590 07/09/2007

KEVIN L. RUSSELL
CHERNOFF, VILHAUER, MCCLUNG & STENZEL LLP
1600 ODSTOWER
601 SW SECOND AVENUE
PORTLAND, OR 97204

EXAMINER	
DIEP, NHON THANH	
ART UNIT	**PAPER NUMBER**
2621	

MAIL DATE	DELIVERY MODE
07/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/933,862	LI ET AL.	
	Examiner	Art Unit	
	Nhon T. Diep	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *8,17 and 23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-7,9-16,18-22 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/20/2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9, line 3 recites the limitation "said" in "said football game". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 5, 9, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Elenbaas et al (US 2005/0028194 A1).

Elenbaas et al disclose a video retrieval system comprising the same method of processing a video including football (paragraph 00126) comprising: (a) a computer identifying a plurality of segments of said video without manual input based upon an event (paragraphs 0018-0019), wherein said event is characterized by a start time

based upon when the ball is put into play and an end time based upon when the ball is considered out of play, where each of said segments includes a plurality of frames of said video (the beginning of "a touch down segment" of the sub category of football is considered as a start time (ball in play) and an end time when the touch down is signaled by the referee); and (b) a computer creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video(story segment identifier); and wherein said plurality of segments are identified by inferring the start time of a said event by an analysis of one or more sequential frames of a candidate segment, said analysis performed without comparing characteristics of any of said one or more sequential frames to characteristics of frames of model sequences of said event occurring (fig. 1, segment 111 and fig. 2A, el. 221, 222, 223, 224 and paragraph 0018, 0022, textual annotations like "ABC", "NBC", "CNN" and other annotations to indicate "a touch down segment" and each of those text formatted information segments will be associated with their corresponding story segment: by looking at these annotations, one can identify the start time of the event and obviously, there is no comparison with subsequent frame) as specified in claims 1, 5 and 9; said event is defined by the rules of football (touch down) as specified in claim 2, the summarization identifies the plurality of segments of the video (story segment identifier) as specified in claim 11; the summarization is a summarized video comprising the plurality of segments excluding at least a portion of the video other than the plurality of segments (story segment identifiers is shorter in length than the entire video broadcast) as specified in claim 12.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-4, 6-7, 10, 13-16, 1-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elenbaas et al.

As applied to claim 1 above, it is noted that Elenbaas et al does not particularly disclose that wherein said start time is temporally proximate a hike; wherein said end time is temporally proximate a tackle of a player with the ball as specified in claims 3-4 and 13-14. The rules of football as well known to all of sport fans, in most cases, allows the start of each play is right after the "hike" of a football and signals the end of each right after a tackle of a player with a football. And therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Elenbaas et al by providing other story segments, in addition to "touch down segment" by indicating a start time right after the "hike" of the football and end time right after a tackle of a player with the ball as well known by the rules of football. Doing so would help to capture most of the action segments of the game of football.

Re claim 6: Although, Elenbaas et al does not particularly disclose that wherein the summarization of the plurality of segments is in the same temporal order as the plurality of segments within the video; however, it would have been obvious that any summarization of the plurality of segments is in the same temporal order as the plurality

of segments within the video as a matter of logic since the temporal order in any video sequence of any sport games should show the progress of the game, from the start to the end.

Re claims 7, 15 and 21: As applied to claim 1 above, it is noted that Elenbaas et al does not particularly disclose the activities are determined based upon the color characteristics of the video or the start of segments is identified based upon detecting at least one spatial region of a generally green color. Since football game is played on grass (natural or artificial), and since green is the most dominant color of grass, it would have been obvious the most of football activities occurs in the green dominated grass field and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to determine the activities of football based on the color green of the grass. Doing so would help to obtain desired activities of the football game.

Re claim 10: The rules of football define a play starts when the ball is snapped and the play ends when tackle is made and therefore, any complete summarization of play, the detecting of the end of the play must follow the start of the same play or other words, the detecting of the end of the play based upon the detect of the start of the same play.

Re claims 16, 18, 22 and 24: Football field has spatial region having a substantially straight border and that more than likely, the spatial region being centrally located within said frame.

Re claims 19 and 20: In the case of natural grass and at some point of the season, because of the wear and tear, the part of the football field, where the start of the play (the snap) is generally taken place, the field is no longer green and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Kawashima et al by modify the generally green color during said processing of the video so the video can be identified as the start of the play and further more, the newly modified generally green color should have a smaller gamut than an initial generally green color from which the generally green color is calculated based upon to make the picture more real.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Kumar et al (US 7,020,351) discloses a method and apparatus for enhancing and indexing video and audio signals.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ND
6/24/2007

NHON DIEP
PRIMARY EXAMINER